

County of San Diego

Department of Environmental Health
Land and Water Quality Division

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WATER SAMPLE GUIDE

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The Department of Environmental Health provides water sampling services through the Public Health Laboratory. Water samples are tested for the presence or absence of bacteria using the *Colilert* analysis. This test indicates whether or not bacteria associated with sewage are present in the water sample. A sample with bacteria absent indicates the water meets bacteriological standards as a potable water source. This Department also performs a nitrate screen test as part of the water sample analysis. Nitrate concentrations of 25 mg/l or higher will require nitrate analysis from a State-certified laboratory. Wells with nitrate concentrations that exceed 45 mg/l are not approved for a potable water source. Water sample results are valid for up to three (3) years in order to obtain building permits.

You will receive the following materials for the delivered water sample:

- One sterile plastic water bottle with a bottle number on the cap. This will be used for the bacteriological sample sent to the Public Health Laboratory.
- One plastic bottle with an "N" on the cap. Rinse bottle with tap water or well water three times prior to use. This will be tested at one of the Department field offices for nitrates.
- Two metal sample containers for the sample bottle storage.
- One water sample request slip, one lab slip and one chain of custody form

In order to provide the water sampling service, the following steps are required.

- Water samples cannot exceed 24 hours from the time the sample is taken at the source and delivery to the lab. It is recommended samples be taken the same day they are delivered to a field office.
- Water samples must be stored with ice or cold packs during storage and transport to one of the field office.
- The water sample should have no measurable amount of chlorine present.
- The well must be in good repair, including a tightly sealed cover.

Water samples must be delivered between 8:00-8:30 a.m. on MONDAYS AND TUESDAYS ONLY at the El Cajon office; or between 8:00-9:00 a.m. on MONDAYS AND TUESDAYS ONLY at the San Marcos office.



The sample collection point should be a faucet at the well or in the distribution system outside of any building. The faucet should drain downward, and be free of vegetation and/or any contact by animals. Interior sink faucets are not a reliable sample point due to bacteria normally found on these fixtures. For new wells, the first water sample is included with the well permit fee. This free sample is available for well permits not more than twelve months old. Resamples will require an additional sample fee.

If the well has just been constructed or opened for maintenance, the well should be disinfected prior to collecting a water sample. The following procedure can be used for well disinfection:

- 1. Pump water from the well until it looks clear.
- 2. Add bleach into the well through the access plug on the top of the well seal using a large funnel. Use at least one quart of unscented household bleach per 100 feet of well depth.
- 3. Start the pump and run the water from the closest tap until there is a strong chlorine odor to the water.
- 4. Attach a piece of hose to the tap and circulate the water through the funnel into the well for at least 30 minutes.
- 5. Stop the pump and do not operate the well for at least 24 hours.
- 6. After 24 hours, start the well and pump water until all the chlorine odor is gone. Let stand at least 24 hours after the chlorine is determined to be zero. A sample is not valid if there is a chlorine residual present. A swimming pool test kit can be used to verify the absence of chlorine.

When you take a well sample to a Department field office, please make sure you have completed the water sample lab slip and the chain of custody sample form. The lab results will be mailed to you within seven days.

